

Section 4

Bicyclist-Motor Vehicle Total Crashes, Injury Crashes and Fatal Crashes, 2000

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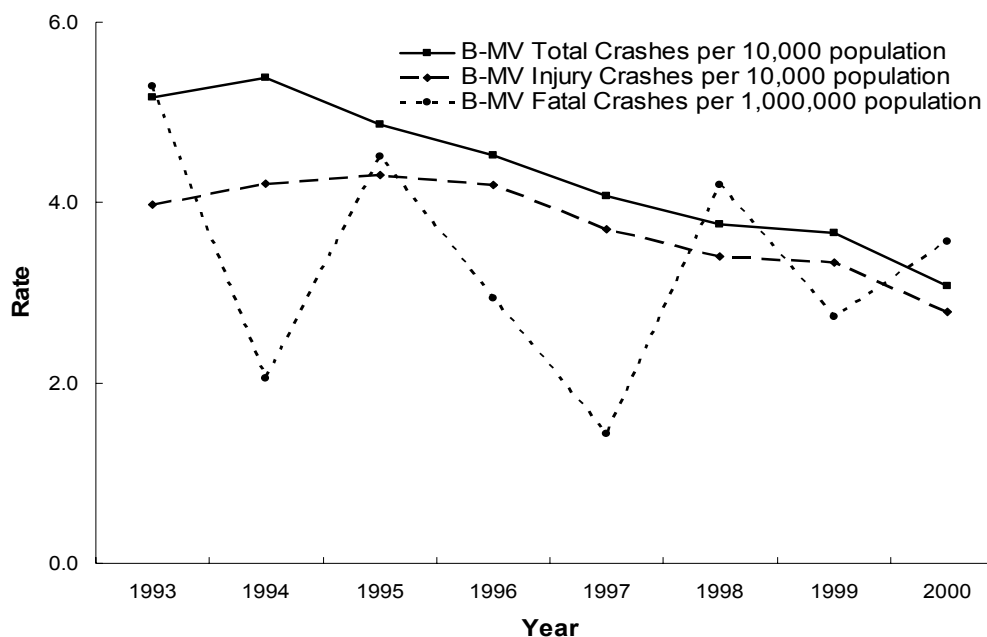
Bicyclist-Motor Vehicle Crashes 1993 - 2000

Table 4.01 and Figure 4.01 shows the trends in bicyclist-motor vehicle (B-MV) crashes for 1993 to 2000. The rates of total bicyclist-motor vehicle crashes and injury crashes have decreased steadily since 1994, while fatal crashes varied year to year. Part of the decrease in reported bicycle crashes from 1997 to 2000 is due to a change in reporting criteria initiated in 1997 that excluded private property crashes. As a result, bicycle crashes that occurred in a parking lot, driveway, sidewalk, and other private roadways would not be included from 1997 forward. Therefore, the years 1993-1996 cannot be compared with years 1997-2000. The small number of bicyclist-motor vehicle fatal crashes makes it difficult to compare increases and decreases from year to year.

Table 4.01 Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1993 - 2000

| Year | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|------|--------------------|----------------------------|---------------------|----------------------------|--------------------|-------------------------------|
| | # | Rate per 10,000 population | # | Rate per 10,000 population | # | Rate per 1,000,000 population |
| 1993 | 977 | 5.2 | 751 | 4.0 | 10 | 5.3 |
| 1994 | 1,047 | 5.4 | 819 | 4.2 | 4 | 2.1 |
| 1995 | 972 | 4.9 | 860 | 4.3 | 9 | 4.5 |
| 1996 | 925 | 4.5 | 858 | 4.2 | 6 | 2.9 |
| 1997 | 855 | 4.1 | 778 | 3.7 | 3 | 1.4 |
| 1998 | 804 | 3.8 | 728 | 3.4 | 9 | 4.2 |
| 1999 | 804 | 3.7 | 732 | 3.3 | 6 | 2.7 |
| 2000 | 691 | 3.1 | 625 | 2.8 | 8 | 3.6 |

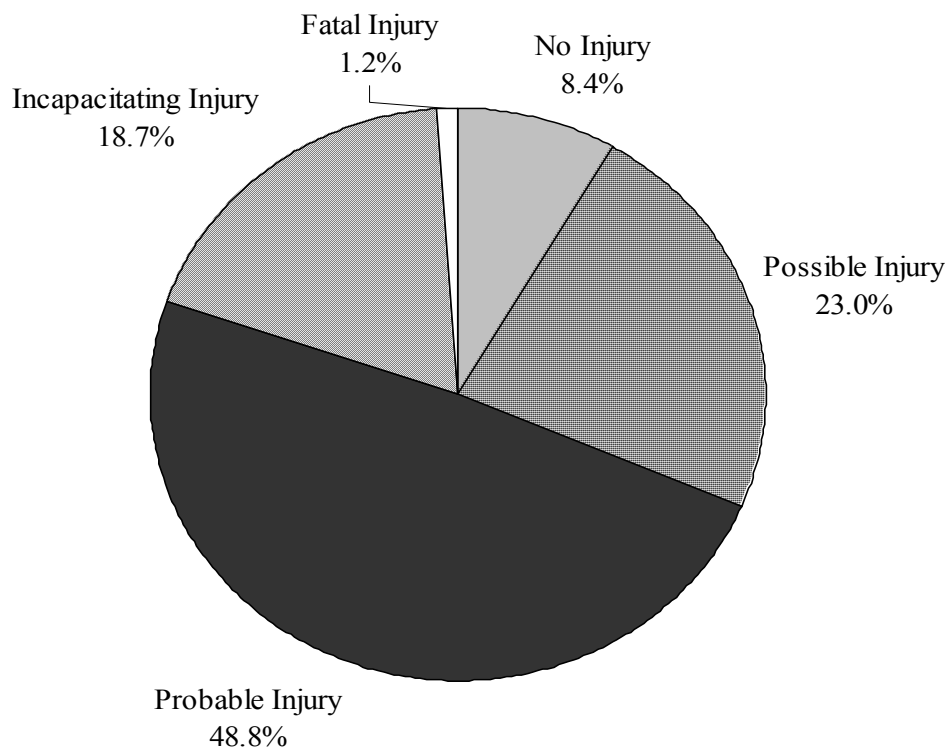
Figure 4.01 Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1993 - 2000



Bicyclist-Motor Vehicle Crash Severity

Figure 4.02 shows the breakdown of bicyclist-motor vehicle crash severity. Almost all bicyclist-motor vehicle crashes resulted in an injury (91.6%) compared to 37.4% of all motor vehicle crashes. However, bicyclist-motor vehicle crashes resulted in only a slightly larger percentage (1.2%) of fatal crashes compared to all motor vehicle crashes (0.6%).

Figure 4.02 Severity of Bicyclist-Motor Vehicle Crashes as Reported by Police, Utah 2000 (n=691)



Bicyclist-Motor Vehicle Crashes by County

The rates of total bicycle-involved motor vehicle crashes, injury crashes and fatal crashes by county are shown in Table 4.02. There are two different rates given; one based on the miles traveled by motor vehicles in the county, and another on the population of the county. The top three counties for total bicyclist-involved motor vehicle crashes and injury crashes based on miles traveled were Salt Lake, Cache, and Utah.

Table 4.02 Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes by County, Utah 2000

| County | B-MV Total Crashes | | | B-MV Injury Crashes | | | B-MV Fatal Crashes | | |
|------------|--------------------|-------------------|----------------------------|---------------------|-------------------|----------------------------|--------------------|----------------------|-----------------------------|
| | # | Rate per 100 MVMT | Rate per 10,000 Population | # | Rate per 100 MVMT | Rate per 10,000 Population | # | Rate per 10,000 MVMT | Rate per 100,000 Population |
| Beaver | 1 | 0.5 | 1.4 | 1 | 0.5 | 1.4 | 0 | 0.0 | 0.0 |
| Box Elder | 9 | 1.0 | 2.1 | 9 | 1.0 | 2.1 | 0 | 0.0 | 0.0 |
| Cache | 37 | 4.7 | 4.0 | 35 | 4.4 | 3.7 | 0 | 0.0 | 0.0 |
| Carbon | 1 | 0.3 | 0.4 | 1 | 0.3 | 0.4 | 0 | 0.0 | 0.0 |
| Daggett | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Davis | 54 | 2.6 | 2.3 | 53 | 2.5 | 2.2 | 0 | 0.0 | 0.0 |
| Duchesne | 2 | 1.0 | 1.4 | 2 | 1.0 | 1.4 | 0 | 0.0 | 0.0 |
| Emery | 1 | 0.3 | 0.9 | 1 | 0.3 | 0.9 | 0 | 0.0 | 0.0 |
| Garfield | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Grand | 3 | 1.1 | 2.7 | 3 | 1.1 | 2.7 | 0 | 0.0 | 0.0 |
| Iron | 6 | 1.1 | 1.7 | 6 | 1.1 | 1.7 | 0 | 0.0 | 0.0 |
| Juab | 2 | 0.6 | 2.4 | 2 | 0.6 | 2.4 | 0 | 0.0 | 0.0 |
| Kane | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Millard | 2 | 0.5 | 1.5 | 2 | 0.5 | 1.5 | 0 | 0.0 | 0.0 |
| Morgan | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Piute | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Rich | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Salt Lake | 356 | 4.9 | 4.1 | 313 | 4.3 | 3.6 | 4 | 5.5 | 0.5 |
| San Juan | 1 | 0.4 | 0.7 | 1 | 0.4 | 0.7 | 0 | 0.0 | 0.0 |
| Sanpete | 2 | 0.9 | 0.9 | 2 | 0.9 | 0.9 | 0 | 0.0 | 0.0 |
| Sevier | 3 | 0.8 | 1.5 | 2 | 0.5 | 1.0 | 0 | 0.0 | 0.0 |
| Summit | 8 | 1.3 | 2.9 | 7 | 1.1 | 2.5 | 1 | 16.1 | 3.6 |
| Tooele | 4 | 0.6 | 1.1 | 4 | 0.6 | 1.1 | 0 | 0.0 | 0.0 |
| Uintah | 4 | 1.4 | 1.6 | 4 | 1.4 | 1.6 | 0 | 0.0 | 0.0 |
| Utah | 115 | 3.8 | 3.3 | 106 | 3.5 | 3.1 | 2 | 6.6 | 0.6 |
| Wasatch | 3 | 1.2 | 2.1 | 3 | 1.2 | 2.1 | 0 | 0.0 | 0.0 |
| Washington | 25 | 2.8 | 2.9 | 23 | 2.6 | 2.7 | 1 | 11.1 | 1.2 |
| Wayne | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Weber | 52 | 3.4 | 2.7 | 45 | 3.0 | 2.4 | 0 | 0.0 | 0.0 |
| Statewide | 691 | 3.1 | 3.2 | 625 | 2.8 | 2.9 | 8 | 3.6 | 0.4 |

Table 4.03 compares the rates of bicyclist-motor vehicle crashes by county in 2000 to 1999. Most counties experienced only slight changes in total bicyclist-motor vehicle crashes and injury crashes from 1999 to 2000.

Table 4.03. Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes by County, Utah 1999 - 2000

| County | B-MV Total Crashes | | | | B-MV Injury Crashes | | | | B-MV Fatal Crashes | | | |
|------------|---------------------------|-----|---------------------------|-----|---------------------------|-----|---------------------------|-----|-----------------------------|------|-----------------------------|------|
| | 1999 | | 2000 | | 1999 | | 2000 | | 1999 | | 2000 | |
| | Rate per 100 # MVMT | | Rate per 100 # MVMT | | Rate per 100 # MVMT | | Rate per 100 # MVMT | | Rate per 10000 # MVMT | | Rate per 10000 # MVMT | |
| Beaver | 0 | 0.0 | 1 | 0.5 | 0 | 0.0 | 1 | 0.5 | 0 | 0.0 | 0 | 0.0 |
| Box Elder | 5 | 0.6 | 9 | 1.0 | 5 | 0.6 | 9 | 1.0 | 0 | 0.0 | 0 | 0.0 |
| Cache | 35 | 4.6 | 37 | 4.7 | 34 | 4.5 | 35 | 4.4 | 0 | 0.0 | 0 | 0.0 |
| Carbon | 5 | 1.4 | 1 | 0.3 | 5 | 1.4 | 1 | 0.3 | 0 | 0.0 | 0 | 0.0 |
| Daggett | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Davis | 70 | 3.5 | 54 | 2.6 | 64 | 3.2 | 53 | 2.5 | 0 | 0.0 | 0 | 0.0 |
| Duchesne | 4 | 2.2 | 2 | 1.0 | 4 | 2.2 | 2 | 1.0 | 0 | 0.0 | 0 | 0.0 |
| Emery | 1 | 0.3 | 1 | 0.3 | 1 | 0.3 | 1 | 0.3 | 0 | 0.0 | 0 | 0.0 |
| Garfield | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Grand | 6 | 2.2 | 3 | 1.1 | 6 | 2.2 | 3 | 1.1 | 0 | 0.0 | 0 | 0.0 |
| Iron | 8 | 1.5 | 6 | 1.1 | 8 | 1.5 | 6 | 1.1 | 0 | 0.0 | 0 | 0.0 |
| Juab | 2 | 0.6 | 2 | 0.6 | 2 | 0.6 | 2 | 0.6 | 0 | 0.0 | 0 | 0.0 |
| Kane | 1 | 0.8 | 0 | 0.0 | 1 | 0.8 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Millard | 1 | 0.2 | 2 | 0.5 | 1 | 0.2 | 2 | 0.5 | 0 | 0.0 | 0 | 0.0 |
| Morgan | 1 | 0.9 | 0 | 0.0 | 1 | 0.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Piute | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Rich | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Salt Lake | 400 | 5.6 | 356 | 4.9 | 356 | 4.9 | 313 | 4.3 | 4 | 5.6 | 4 | 5.5 |
| San Juan | 3 | 1.2 | 1 | 0.4 | 3 | 1.2 | 1 | 0.4 | 0 | 0.0 | 0 | 0.0 |
| Sanpete | 3 | 1.3 | 2 | 0.9 | 3 | 1.3 | 2 | 0.9 | 0 | 0.0 | 0 | 0.0 |
| Sevier | 3 | 0.8 | 3 | 0.8 | 3 | 0.8 | 2 | 0.5 | 0 | 0.0 | 0 | 0.0 |
| Summit | 2 | 0.3 | 8 | 1.3 | 2 | 0.3 | 7 | 1.1 | 0 | 0.0 | 1 | 16.1 |
| Tooele | 6 | 0.9 | 4 | 0.6 | 6 | 0.9 | 4 | 0.6 | 0 | 0.0 | 0 | 0.0 |
| Uintah | 5 | 1.8 | 4 | 1.4 | 4 | 1.5 | 4 | 1.4 | 1 | 36.7 | 0 | 0.0 |
| Utah | 171 | 5.8 | 115 | 3.8 | 159 | 5.4 | 106 | 3.5 | 1 | 3.4 | 2 | 6.6 |
| Wasatch | 5 | 2.1 | 3 | 1.2 | 5 | 2.1 | 3 | 1.2 | 0 | 0.0 | 0 | 0.0 |
| Washington | 19 | 2.3 | 25 | 2.8 | 19 | 2.3 | 23 | 2.6 | 0 | 0.0 | 1 | 11.1 |
| Wayne | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Weber | 48 | 3.2 | 52 | 3.4 | 40 | 2.7 | 45 | 3.0 | 0 | 0.0 | 0 | 0.0 |
| Statewide | 804 | 3.7 | 691 | 3.1 | 732 | 3.4 | 625 | 2.8 | 6 | 2.8 | 8 | 3.6 |

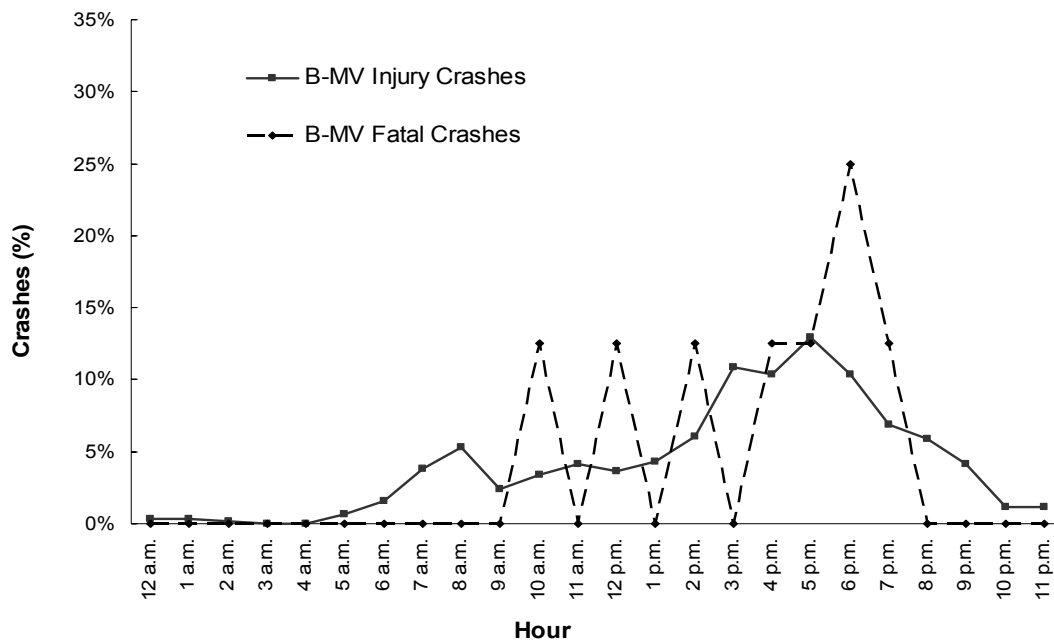
Bicyclist-Motor Vehicle Crash Times

Table 4.04 and Figure 4.03 show that total bicyclist-motor vehicle crashes and injury crashes peaked during the late afternoon and early evening hours (3 p.m. to 7 p.m.).

Table 4.04 Hour of Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000

| Hour | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|-------------|--------------------|--------|---------------------|--------|--------------------|--------|
| | # | % | # | % | # | % |
| 12 a.m. | 2 | 0.3% | 2 | 0.3% | 0 | 0.0% |
| 1 a.m. | 2 | 0.3% | 2 | 0.3% | 0 | 0.0% |
| 2 a.m. | 1 | 0.1% | 1 | 0.2% | 0 | 0.0% |
| 3 a.m. | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| 4 a.m. | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| 5 a.m. | 5 | 0.7% | 4 | 0.6% | 0 | 0.0% |
| 6 a.m. | 11 | 1.6% | 10 | 1.6% | 0 | 0.0% |
| 7 a.m. | 26 | 3.8% | 24 | 3.8% | 0 | 0.0% |
| 8 a.m. | 34 | 4.9% | 33 | 5.3% | 0 | 0.0% |
| 9 a.m. | 18 | 2.6% | 15 | 2.4% | 0 | 0.0% |
| 10 a.m. | 24 | 3.5% | 21 | 3.4% | 1 | 12.5% |
| 11 a.m. | 28 | 4.1% | 26 | 4.2% | 0 | 0.0% |
| 12 p.m. | 27 | 3.9% | 23 | 3.7% | 1 | 12.5% |
| 1 p.m. | 30 | 4.3% | 27 | 4.3% | 0 | 0.0% |
| 2 p.m. | 45 | 6.5% | 38 | 6.1% | 1 | 12.5% |
| 3 p.m. | 76 | 11.0% | 68 | 10.9% | 0 | 0.0% |
| 4 p.m. | 73 | 10.6% | 65 | 10.4% | 1 | 12.5% |
| 5 p.m. | 87 | 12.6% | 81 | 13.0% | 1 | 12.5% |
| 6 p.m. | 71 | 10.3% | 65 | 10.4% | 2 | 25.0% |
| 7 p.m. | 48 | 6.9% | 43 | 6.9% | 1 | 12.5% |
| 8 p.m. | 40 | 5.8% | 37 | 5.9% | 0 | 0.0% |
| 9 p.m. | 28 | 4.1% | 26 | 4.2% | 0 | 0.0% |
| 10 p.m. | 7 | 1.0% | 7 | 1.1% | 0 | 0.0% |
| 11 p.m. | 8 | 1.2% | 7 | 1.1% | 0 | 0.0% |
| Grand Total | 691 | 100.0% | 625 | 100.0% | 8 | 100.0% |

Figure 4.03 Hour of Bicyclist-Motor Vehicle (B-MV) Injury Crashes and Fatal Crashes, Utah 2000 (See Table 4.04 for values)



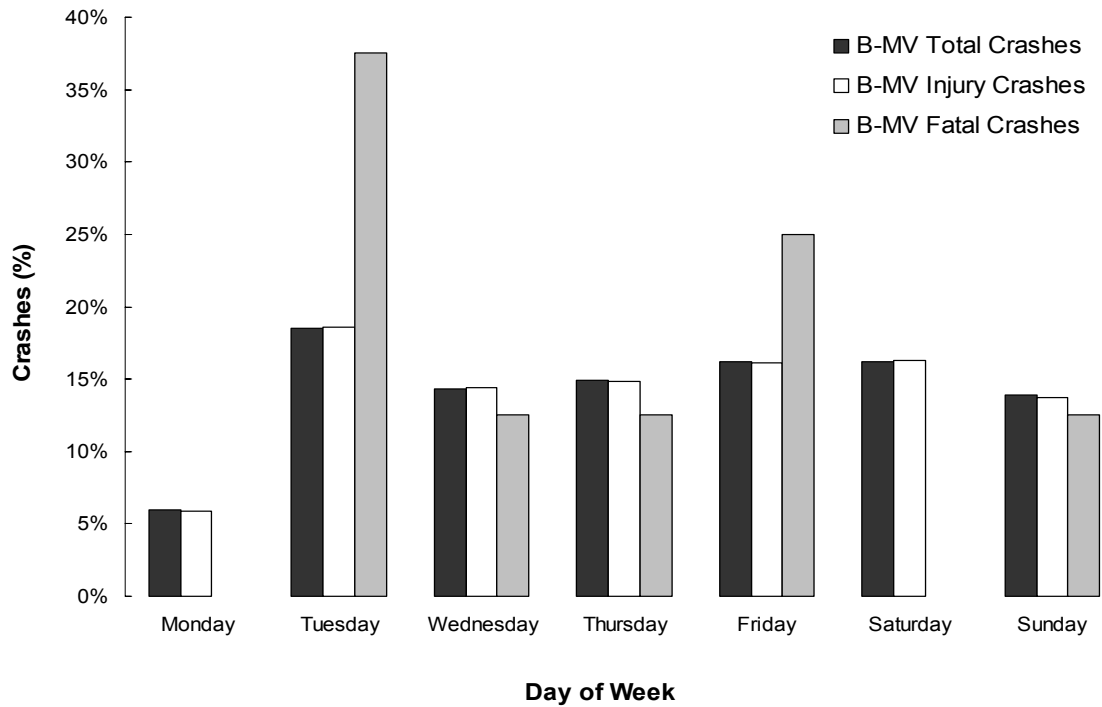
June through September had the highest rates of total bicyclist-motor vehicle crashes and injury crashes per day (Table 4.05).

Table 4.05 Month of Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000

| Crash Month | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|-------------|--------------------|--------------|---------------------|--------------|--------------------|--------------|
| | # | Rate per Day | # | Rate per Day | # | Rate per Day |
| January | 18 | 0.6 | 17 | 0.5 | 0 | 0.0 |
| February | 19 | 0.7 | 16 | 0.6 | 1 | 0.0 |
| March | 46 | 1.5 | 43 | 1.4 | 0 | 0.0 |
| April | 55 | 1.8 | 48 | 1.6 | 0 | 0.0 |
| May | 74 | 2.4 | 68 | 2.2 | 1 | 0.0 |
| June | 98 | 3.3 | 91 | 3.0 | 1 | 0.0 |
| July | 86 | 2.8 | 79 | 2.5 | 1 | 0.0 |
| August | 96 | 3.1 | 93 | 3.0 | 0 | 0.0 |
| September | 88 | 2.9 | 75 | 2.5 | 2 | 0.1 |
| October | 64 | 2.1 | 53 | 1.7 | 1 | 0.0 |
| November | 32 | 1.1 | 30 | 1.0 | 0 | 0.0 |
| December | 15 | 0.5 | 12 | 0.4 | 1 | 0.0 |
| Grand Total | 691 | 1.9 | 625 | 1.7 | 8 | 0.0 |

Figure 4.04 and Table 4.06 show that the highest percentage of total bicyclist-motor vehicle crashes and injury crashes occurred on Tuesday, while the lowest number occurred on Monday. Over one-third (37.5%) of fatal bicyclist-motor vehicle crashes occurred on Tuesday.

Figure 4.04 Day of Week for Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000



Note: The above graph is based on percentages for the different crash categories. To read the above graph, look at one category across the days of the week. For example, look at only the white bars (i.e. bicyclist-motor vehicle injury crashes) from day to day. Do not compare the heights of the different crash categories for a specific day.

Table 4.06 Day of Week for Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000

| Day of Week | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|-------------|--------------------|--------|---------------------|--------|--------------------|--------|
| | # | % | # | % | # | % |
| Monday | 41 | 5.9% | 37 | 5.9% | 0 | 0.0% |
| Tuesday | 128 | 18.5% | 116 | 18.6% | 3 | 37.5% |
| Wednesday | 99 | 14.3% | 90 | 14.4% | 1 | 12.5% |
| Thursday | 103 | 14.9% | 93 | 14.9% | 1 | 12.5% |
| Friday | 112 | 16.2% | 101 | 16.2% | 2 | 25.0% |
| Saturday | 112 | 16.2% | 102 | 16.3% | 0 | 0.0% |
| Sunday | 96 | 13.9% | 86 | 13.8% | 1 | 12.5% |
| Grand Total | 691 | 100.0% | 625 | 100.0% | 8 | 100.0% |

Bicyclist-Motor Vehicle Crash Characteristics

Urban areas accounted for 87.5% of the fatal bicyclist-motor vehicle crashes and 86.7% if the total bicycle-motor vehicle crashes (Table 4.07).

Table 4.07 Urban / Rural Location of Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000

| Urban / Rural Location | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|------------------------------------|--------------------|--------|---------------------|--------|--------------------|--------|
| | # | % | # | % | # | % |
| Rural Area - Up to 5,000 | 92 | 13.3% | 86 | 13.8% | 1 | 12.5% |
| Small Urban - 5,000 to 49,999 | 39 | 5.6% | 36 | 5.8% | 1 | 12.5% |
| Moderate Urban - 50,000 to 199,999 | 26 | 3.8% | 24 | 3.8% | 0 | 0.0% |
| Large Urban - 200,000 or More | 534 | 77.3% | 479 | 76.6% | 6 | 75.0% |
| Missing | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Grand Total | 691 | 100.0% | 625 | 100.0% | 8 | 100.0% |

Table 4.08 shows the type of vehicles involved in bicyclist-motor vehicle crashes. Over half of the vehicles involved in all three types of bicyclist-motor vehicle crashes were passenger cars (56.8%, 56.5%, and 50.0% respectively).

Table 4.08 Type of Vehicles Involved in Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000

| Vehicle Type | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|---------------------|--------------------|--------|---------------------|--------|--------------------|--------|
| | # | % | # | % | # | % |
| Passenger Car | 394 | 56.8% | 355 | 56.5% | 4 | 50.0% |
| Pickup Truck / Vans | 259 | 37.3% | 237 | 37.7% | 2 | 25.0% |
| Unknown | 21 | 3.0% | 19 | 3.0% | 0 | 0.0% |
| Large Truck/Semi | 9 | 1.3% | 7 | 1.1% | 1 | 12.5% |
| Other | 7 | 1.0% | 6 | 1.0% | 1 | 12.5% |
| Motorcycle | 4 | 0.6% | 4 | 0.6% | 0 | 0.0% |
| School Bus | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Grand Total | 694 | 100.0% | 628 | 100.0% | 8 | 100.0% |

Note: More than one vehicle may be involved in a bicyclist- motor vehicle crash. Unknown vehicles are 'hit and run' vehicles.

Bicyclist-Motor Vehicle Crash Violations and Contributing Factors

There were 691 drivers involved in bicyclist-motor vehicle crashes, of which 160 (23.2%) were cited for a traffic violation (Table 4.09). The leading violation was "failure to yield right of way" (35.6%). Only 2 of the 8 (25%) drivers involved in fatal bicyclist-motor vehicle crashes received a citation at the scene.

Table 4.09 Violations for Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000

| Violations | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|---------------------------------|--------------------|--------|---------------------|--------|--------------------|--------|
| | # | % | # | % | # | % |
| Failure to Yield Right of Way | 57 | 35.6% | 55 | 36.7% | 0 | 0.0% |
| Improper Lookout | 40 | 25.0% | 36 | 24.0% | 1 | 50.0% |
| All Other Non-Moving Violations | 27 | 16.9% | 25 | 16.7% | 0 | 0.0% |
| Negligent Collision | 5 | 3.1% | 5 | 3.3% | 0 | 0.0% |
| All Other Moving Violations | 5 | 3.1% | 5 | 3.3% | 0 | 0.0% |
| Improper Turn | 4 | 2.5% | 4 | 2.7% | 0 | 0.0% |
| Hit and Run | 4 | 2.5% | 3 | 2.0% | 0 | 0.0% |
| Stop Sign | 3 | 1.9% | 3 | 2.0% | 0 | 0.0% |
| Speeding | 3 | 1.9% | 3 | 2.0% | 0 | 0.0% |
| Red Light | 3 | 1.9% | 3 | 2.0% | 0 | 0.0% |
| Reckless Driving | 3 | 1.9% | 3 | 2.0% | 0 | 0.0% |
| Improper Backing | 2 | 1.3% | 2 | 1.3% | 0 | 0.0% |
| Wrong Side of Road | 1 | 0.6% | 1 | 0.7% | 0 | 0.0% |
| Following Too Close | 1 | 0.6% | 1 | 0.7% | 0 | 0.0% |
| Improper Start and Stop | 1 | 0.6% | 1 | 0.7% | 0 | 0.0% |
| Vehicle Homicide | 1 | 0.6% | 0 | 0.0% | 1 | 50.0% |
| Grand Total | 160 | 100.0% | 150 | 100.0% | 2 | 100.0% |

The factors contributing to bicycle-motor vehicle crashes are listed in Table 4.10. These factors were coded by the officers at the scene for motor vehicles involved in the crash. The officer may record no contributing factor or up to two different contributing factors. The primary contributing factors recorded for total bicyclist-motor vehicle crashes and injury crashes were "improper lookout", "failure to yield right of way", and "hit and run". "Driving under the influence" accounted for only 0.2% of contributing factors in total bicyclist-motor vehicle crashes and injury crashes.

Table 4.10 Contributing Factors of Bicyclist-Motor Vehicle (B-MV) Total Crashes and Injury Crashes, Utah 2000

| Contributing Factors | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|--------------------------------------|--------------------|--------|---------------------|--------|--------------------|--------|
| | # | % | # | % | # | % |
| Improper Lookout | 207 | 43.0% | 186 | 43.5% | 3 | 37.5% |
| Failed to Yield the Right of Way | 122 | 25.4% | 111 | 25.9% | 0 | 0.0% |
| Hit and Run | 62 | 12.9% | 54 | 12.6% | 0 | 0.0% |
| Other Improper Driving | 19 | 4.0% | 16 | 3.7% | 2 | 25.0% |
| Speed Too Fast | 17 | 3.5% | 14 | 3.3% | 2 | 25.0% |
| Improper Turn | 16 | 3.3% | 14 | 3.3% | 0 | 0.0% |
| Non-Contact Vehicle Involved | 6 | 1.2% | 5 | 1.2% | 0 | 0.0% |
| Passed Stop Sign | 5 | 1.0% | 5 | 1.2% | 0 | 0.0% |
| Disregarded Traffic Signal | 4 | 0.8% | 4 | 0.9% | 0 | 0.0% |
| Drove Left of Center | 3 | 0.6% | 3 | 0.7% | 0 | 0.0% |
| Following Too Closely | 2 | 0.4% | 2 | 0.5% | 0 | 0.0% |
| Improper Backing | 2 | 0.4% | 2 | 0.5% | 0 | 0.0% |
| Improper Overtaking | 2 | 0.4% | 2 | 0.5% | 0 | 0.0% |
| Improper Parking | 2 | 0.4% | 2 | 0.5% | 0 | 0.0% |
| Windshield Not Clear | 2 | 0.4% | 2 | 0.5% | 0 | 0.0% |
| Asleep | 1 | 0.2% | 0 | 0.0% | 0 | 0.0% |
| Cargo Loss or Shift | 1 | 0.2% | 1 | 0.2% | 0 | 0.0% |
| Driving Under the Influence | 1 | 0.2% | 1 | 0.2% | 0 | 0.0% |
| Failed to Signal | 1 | 0.2% | 1 | 0.2% | 0 | 0.0% |
| Headlights Insufficient or Out | 1 | 0.2% | 1 | 0.2% | 0 | 0.0% |
| Other Defective Condition | 1 | 0.2% | 0 | 0.0% | 1 | 12.5% |
| Other Lights or Reflecting/Defective | 1 | 0.2% | 1 | 0.2% | 0 | 0.0% |
| Vehicle Rolling in Traffic Lane | 1 | 0.2% | 0 | 0.0% | 0 | 0.0% |
| Wrong Side of Road | 1 | 0.2% | 0 | 0.0% | 0 | 0.0% |
| Wrong Way on One Way Street | 1 | 0.2% | 1 | 0.2% | 0 | 0.0% |
| Grand Total | 481 | 100.0% | 428 | 100.0% | 8 | 100.0% |

Drivers Involved in Bicyclist-Motor Vehicle Crashes

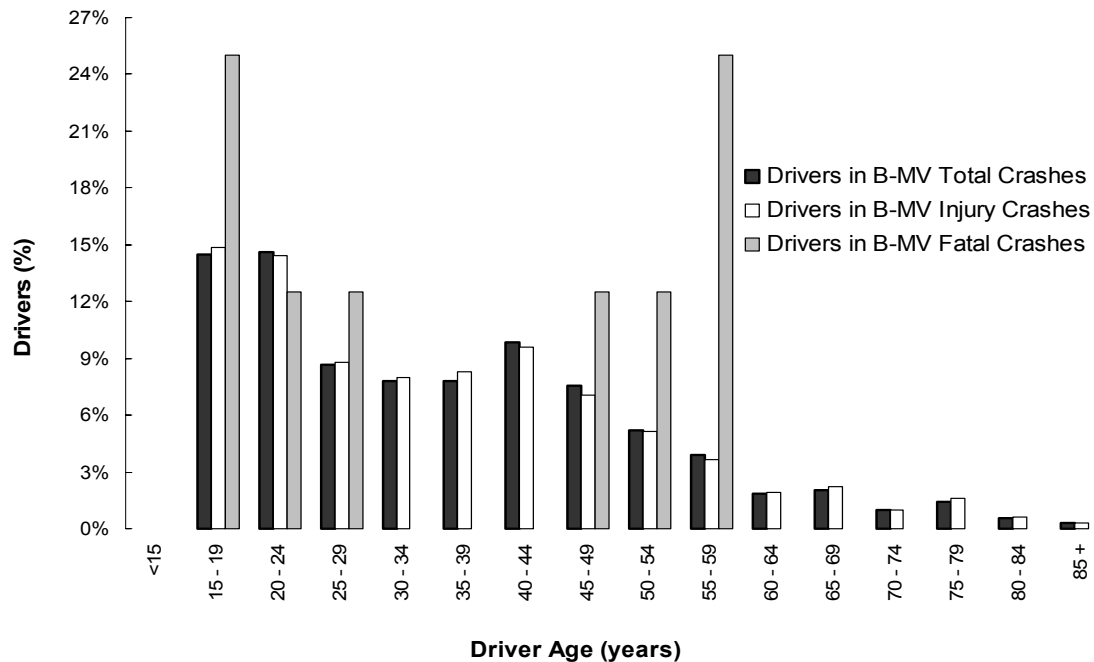
Drivers between the ages of 15 to 24 years represented the greatest percentage of motor vehicle drivers (29.1%) involved in a total bicyclist-motor vehicle crash, while drivers aged 15 to 19 years and 55 to 59 years each accounted for one-fourth of drivers involved in fatal bicyclist-motor vehicle crashes (Table 4.11 and Figure 4.05).

Table 4.11 Age of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000

| Driver's Age | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|--------------|--------------------|--------|---------------------|--------|--------------------|--------|
| | # Drivers | % | # Drivers | % | # Drivers | % |
| <15 | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| 15 - 19 | 100 | 14.5% | 93 | 14.9% | 2 | 25.0% |
| 20 - 24 | 101 | 14.6% | 90 | 14.4% | 1 | 12.5% |
| 25 - 29 | 60 | 8.7% | 55 | 8.8% | 1 | 12.5% |
| 30 - 34 | 54 | 7.8% | 50 | 8.0% | 0 | 0.0% |
| 35 - 39 | 54 | 7.8% | 52 | 8.3% | 0 | 0.0% |
| 40 - 44 | 68 | 9.8% | 60 | 9.6% | 0 | 0.0% |
| 45 - 49 | 52 | 7.5% | 44 | 7.0% | 1 | 12.5% |
| 50 - 54 | 36 | 5.2% | 32 | 5.1% | 1 | 12.5% |
| 55 - 59 | 27 | 3.9% | 23 | 3.7% | 2 | 25.0% |
| 60 - 64 | 13 | 1.9% | 12 | 1.9% | 0 | 0.0% |
| 65 - 69 | 14 | 2.0% | 14 | 2.2% | 0 | 0.0% |
| 70 - 74 | 7 | 1.0% | 6 | 1.0% | 0 | 0.0% |
| 75 - 79 | 10 | 1.4% | 10 | 1.6% | 0 | 0.0% |
| 80 - 84 | 4 | 0.6% | 4 | 0.6% | 0 | 0.0% |
| 85 + | 2 | 0.3% | 2 | 0.3% | 0 | 0.0% |
| Missing | 89 | 12.9% | 78 | 12.5% | 0 | 0.0% |
| Grand Total | 691 | 100.0% | 625 | 100.0% | 8 | 100.0% |

Note: More than one driver may be involved in bicyclist-motor vehicle crashes and driver information may be missing (e.g. a hit and run).

Figure 4.05 Age of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000 (See Table 4.11 for values)



Note: The above graph is based on percentage for the different crash categories. To read the above graph, look at one category across the age groups. For example, look at only the white bars (i.e. drivers in bicyclist-motor vehicle injury crashes) from age group to age group. Do not compare the heights of the different crash categories for a specific age group.

Table 4.12 shows that half (51.8%) of motor vehicle drivers involved in total bicycle-motor vehicle crashes, and injury bicycle-motor vehicle crashes were male; an even larger percentage of drivers in fatal crashes were male (75%).

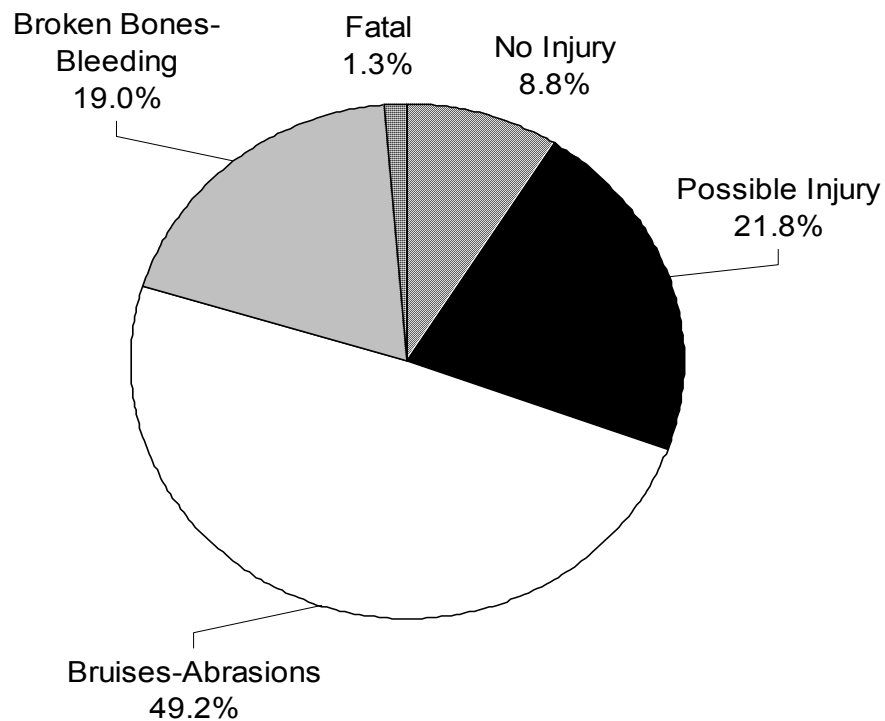
Table 4.12 Gender of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Total Crashes, Injury Crashes and Fatal Crashes, Utah 2000

| Driver's Gender | B-MV Total Crashes | | B-MV Injury Crashes | | B-MV Fatal Crashes | |
|-----------------|--------------------|--------|---------------------|--------|--------------------|--------|
| | # Drivers | % | # Drivers | % | # Drivers | % |
| Female | 275 | 39.8% | 252 | 40.3% | 2 | 25.0% |
| Male | 358 | 51.8% | 322 | 51.5% | 6 | 75.0% |
| Missing | 58 | 8.4% | 51 | 8.2% | 0 | 0.0% |
| Grand Total | 691 | 100.0% | 625 | 100.0% | 8 | 100.0% |

Bicyclist Injury Severity

Figure 4.06 shows that the majority of bicyclists sustained an injury (91.2%) compared to 21.6% of all motor vehicle crash participants. The percentage of bicyclist fatalities (1.3%) was higher than for all motor vehicle crash participants (0.3%). There were 9 bicyclists killed on Utah public roadways in 2000, compared to 7 bicyclists killed during 1999.

Figure 4.06 Bicyclist Injury Severity as Reported by Police, Utah 2000 (n=706)



Bicyclists by County

Table 4.13 shows the number of bicyclists, injured bicyclists and bicyclist fatalities involved in motor vehicle crashes by county. The leading counties for total bicyclists and injured bicyclists involved in a motor vehicle crash per million vehicle miles traveled were Salt Lake, Cache, Utah, and Weber Counties.

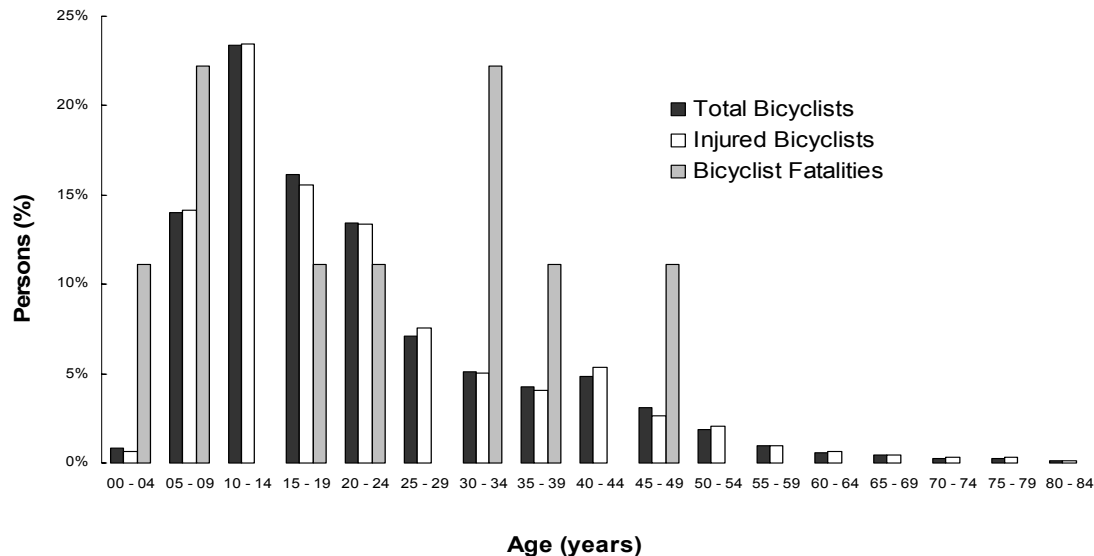
Table 4.13 Total Bicyclists, Injured Bicyclists and Bicyclist Fatalities by County, Utah 2000

| County | Total Bicyclists | | | Injured Bicyclists | | | Bicyclist Fatalities | | |
|------------|------------------|----------|------------|--------------------|----------|------------|----------------------|----------|------------|
| | # | Rate per | Rate Per | # | Rate per | Rate Per | # | Rate per | Rate Per |
| | | 100 | 10,000 | | 100 | 10,000 | | 10,000 | 100,000 |
| | | MVMT | Population | | MVMT | Population | | MVMT | Population |
| Beaver | 1 | 0.5 | 1.4 | 1 | 0.5 | 1.4 | 0 | 0.0 | 0.0 |
| Box Elder | 10 | 1.1 | 2.3 | 10 | 1.1 | 2.3 | 0 | 0.0 | 0.0 |
| Cache | 35 | 4.4 | 3.7 | 34 | 4.3 | 3.6 | 0 | 0.0 | 0.0 |
| Carbon | 1 | 0.3 | 0.4 | 1 | 0.3 | 0.4 | 0 | 0.0 | 0.0 |
| Daggett | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Davis | 54 | 2.6 | 2.3 | 53 | 2.5 | 2.2 | 0 | 0.0 | 0.0 |
| Duchesne | 2 | 1.0 | 1.4 | 2 | 1.0 | 1.4 | 0 | 0.0 | 0.0 |
| Emery | 1 | 0.3 | 0.9 | 1 | 0.3 | 0.9 | 0 | 0.0 | 0.0 |
| Garfield | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Grand | 3 | 1.1 | 2.7 | 3 | 1.1 | 2.7 | 0 | 0.0 | 0.0 |
| Iron | 7 | 1.2 | 2.0 | 7 | 1.2 | 2.0 | 0 | 0.0 | 0.0 |
| Juab | 2 | 0.6 | 2.4 | 2 | 0.6 | 2.4 | 0 | 0.0 | 0.0 |
| Kane | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Millard | 2 | 0.5 | 1.5 | 2 | 0.5 | 1.5 | 0 | 0.0 | 0.0 |
| Morgan | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Piute | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Rich | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Salt Lake | 362 | 4.9 | 4.1 | 317 | 4.3 | 3.6 | 4 | 5.5 | 0.5 |
| San Juan | 1 | 0.4 | 0.7 | 1 | 0.4 | 0.7 | 0 | 0.0 | 0.0 |
| Sanpete | 2 | 0.9 | 0.9 | 2 | 0.9 | 0.9 | 0 | 0.0 | 0.0 |
| Sevier | 3 | 0.8 | 1.5 | 2 | 0.5 | 1.0 | 0 | 0.0 | 0.0 |
| Summit | 11 | 1.8 | 4.0 | 9 | 1.4 | 3.3 | 1 | 16.1 | 3.6 |
| Tooele | 4 | 0.6 | 1.1 | 4 | 0.6 | 1.1 | 0 | 0.0 | 0.0 |
| Uintah | 5 | 1.7 | 2.0 | 5 | 1.7 | 2.0 | 0 | 0.0 | 0.0 |
| Utah | 114 | 3.8 | 3.3 | 104 | 3.4 | 3.0 | 3 | 9.9 | 0.9 |
| Wasatch | 3 | 1.2 | 2.1 | 3 | 1.2 | 2.1 | 0 | 0.0 | 0.0 |
| Washington | 26 | 2.9 | 3.0 | 23 | 2.6 | 2.7 | 1 | 11.1 | 1.2 |
| Wayne | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Weber | 57 | 3.8 | 3.0 | 49 | 3.2 | 2.6 | 0 | 0.0 | 0.0 |
| Statewide | 706 | 3.1 | 3.2 | 635 | 2.8 | 2.9 | 9 | 4.0 | 0.4 |

Bicyclist Characteristics

Figure 4.07 and Table 4.14 show that most total bicyclists (67.0%) and injured bicyclists (66.7%) involved in a crash were between the ages of 5 to 24 years. This same age group represented almost half (44.4%) of the fatalities.

Figure 4.07 Age of Total Bicyclists, Injured Bicyclists and Bicyclist Fatalities Involved in a Crash, Utah 2000



Note: The above graph is based on percentages for the different injury categories. To read the above graph, look at one category across the age groups. For example, look at only the white bars (i.e. injured bicyclist) from age group to age group. Do not compare the heights of the different injury categories for a specific age group.

Table 4.14 Age of Total Bicyclists, Injured Bicyclists and Bicyclist Fatalities, Utah 2000

| Age | Total Bicyclists | | Injured Bicyclists | | Bicyclist Fatalities | |
|-------------|------------------|--------|--------------------|--------|----------------------|--------|
| | # | % | # | % | # | % |
| 00 - 04 | 6 | 0.8% | 4 | 0.6% | 1 | 11.1% |
| 05 - 09 | 99 | 14.0% | 90 | 14.2% | 2 | 22.2% |
| 10 - 14 | 165 | 23.4% | 149 | 23.5% | 0 | 0.0% |
| 15 - 19 | 114 | 16.1% | 99 | 15.6% | 1 | 11.1% |
| 20 - 24 | 95 | 13.5% | 85 | 13.4% | 1 | 11.1% |
| 25 - 29 | 50 | 7.1% | 48 | 7.6% | 0 | 0.0% |
| 30 - 34 | 36 | 5.1% | 32 | 5.0% | 2 | 22.2% |
| 35 - 39 | 30 | 4.2% | 26 | 4.1% | 1 | 11.1% |
| 40 - 44 | 34 | 4.8% | 34 | 5.4% | 0 | 0.0% |
| 45 - 49 | 22 | 3.1% | 17 | 2.7% | 1 | 11.1% |
| 50 - 54 | 13 | 1.8% | 13 | 2.0% | 0 | 0.0% |
| 55 - 59 | 7 | 1.0% | 6 | 0.9% | 0 | 0.0% |
| 60 - 64 | 4 | 0.6% | 4 | 0.6% | 0 | 0.0% |
| 65 - 69 | 3 | 0.4% | 3 | 0.5% | 0 | 0.0% |
| 70 - 74 | 2 | 0.3% | 2 | 0.3% | 0 | 0.0% |
| 75 - 79 | 2 | 0.3% | 2 | 0.3% | 0 | 0.0% |
| 80 - 84 | 1 | 0.1% | 1 | 0.2% | 0 | 0.0% |
| Missing | 23 | 3.3% | 20 | 3.1% | 0 | 0.0% |
| Grand Total | 706 | 100.0% | 635 | 100.0% | 9 | 100.0% |

The majority of the total bicyclists (78.6%) and injured bicyclists (78.1%) involved in crashes were male, while only 55.6% of bicyclist fatalities were male (Table 4.15).

Table 4.15 Gender of Total Bicyclists, Injured Bicyclists and Bicyclist Fatalities, Utah 2000

| Gender | Total Bicyclists | | Injured Bicyclists | | Bicyclist Fatalities | |
|---------------|-------------------------|----------|---------------------------|----------|-----------------------------|----------|
| | # | % | # | % | # | % |
| Female | 150 | 21.2% | 138 | 21.7% | 4 | 44.4% |
| Male | 555 | 78.6% | 496 | 78.1% | 5 | 55.6% |
| Missing | 1 | 0.1% | 1 | 0.2% | 0 | 0.0% |
| Grand Total | 706 | 100.0% | 635 | 100.0% | 9 | 100.0% |

The actions of the bicyclist prior to the crash are shown in Table 4.16. The leading total bicyclists and injured bicyclists actions prior to the crash were “riding in roadway with traffic” and “crossing at intersection with signal”. The leading bicyclist actions prior to crash for the bicyclists who died were “riding in roadway with traffic,” “crossing not at intersection” and “riding on sidewalk.”

Table 4.16 Bicyclist Action Prior to Crash, Utah 2000

| Bicyclist Action Prior to Crash | Total Bicyclists | | Injured Bicyclists | | Bicyclist Fatalities | |
|--|-------------------------|----------|---------------------------|----------|-----------------------------|----------|
| | # | % | # | % | # | % |
| Riding in Roadway With Traffic | 148 | 21.0% | 138 | 21.7% | 2 | 22.2% |
| Crossing Intersection with Signal | 117 | 16.6% | 102 | 16.1% | 1 | 11.1% |
| Riding in Roadway Against Traffic | 105 | 14.9% | 99 | 15.6% | 0 | 0.0% |
| Crossing Intersection No Signal | 93 | 13.2% | 81 | 12.8% | 1 | 11.1% |
| Crossing Intersection Against Signal | 74 | 10.5% | 62 | 9.8% | 0 | 0.0% |
| Crossing Not at Intersection | 67 | 9.5% | 62 | 9.8% | 2 | 22.2% |
| Riding on Sidewalk | 36 | 5.1% | 32 | 5.0% | 2 | 22.2% |
| Other in Roadway | 20 | 2.8% | 16 | 2.5% | 1 | 11.1% |
| Not Stated | 12 | 1.7% | 12 | 1.9% | 0 | 0.0% |
| Coming from Behind Parked Cars | 11 | 1.6% | 11 | 1.7% | 0 | 0.0% |
| Crossing Intersection Diagonally | 6 | 0.8% | 6 | 0.9% | 0 | 0.0% |
| Playing in Roadway | 6 | 0.8% | 5 | 0.8% | 0 | 0.0% |
| Not in Roadway | 4 | 0.6% | 3 | 0.5% | 0 | 0.0% |
| Hitching on Vehicle | 2 | 0.3% | 2 | 0.3% | 0 | 0.0% |
| Walking in Roadway with Traffic | 1 | 0.1% | 1 | 0.2% | 0 | 0.0% |
| Standing on Crosswalk Median | 1 | 0.1% | 1 | 0.2% | 0 | 0.0% |
| Missing | 3 | 0.4% | 2 | 0.3% | 0 | 0.0% |
| Grand Total | 706 | 100.0% | 635 | 100.0% | 9 | 100.0% |

Alcohol and Other Drugs:

Of the 9 bicyclist fatalities, none were impaired by alcohol or other drugs. Of the motor vehicle drivers that were involved in fatal bicyclist-motor vehicle crashes, 1 was impaired by alcohol or other drugs.

Bicyclists and Helmet

Helmet was not coded consistently at the time-of-crash for bicyclists and cannot be reported with accuracy. As a result, it is not included in this summary.